

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VDRX3244T**

**40HP, 1775//1480RPM, 3PH, 60/50HZ, 324TC, XPF**

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGY276	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:		Layout:	12LYE292	Poles:	04	Created Date:	06-06-2019
Base:		Eff. Date:	08-31-2021	Leads:	9#8		

Specs			
Catalog Number:	VDRX32444T	Duty Rating:	CONT
Enclosure:	XPFC	Electrically Isolated Bearing:	Not Electrically Isolated
Frame:	324TC	Feedback Device:	NO FEEDBACK
Frame Material:	Iron	Heater Indicator:	No Heater
Output @ Frequency:	30.000 HP @ 50 HZ	Insulation Class:	F
	40.000 HP @ 60 HZ	Inverter Code:	Inverter Duty
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	IP Rating:	NONE
Voltage @ Frequency:	230.0 V @ 60 HZ	KVA Code:	H
	190.0 V @ 50 HZ	Lifting Lugs:	Standard Lifting Lugs
	380.0 V @ 50 HZ	Locked Bearing Indicator:	Locked Bearing
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	CLI GP C,D	Motor Type:	1254M
XP Division:	Division I	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	82
	CSA EEV	Product Family:	Hazardous Location Motor
	CSA	Pulley Face Code:	C-Face
Auxillary Box:	No Auxillary Box	Rodent Screen:	None
Auxillary Box Lead Termination:	None	RoHS Status:	ROHS NON-COMPLIANT

<b>Base Indicator:</b>	No Mounting	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
<b>Bearing Grease Type:</b>	Polyrex EM (-20F +300F)	<b>Shaft Rotation:</b>	Reversible
<b>Blower:</b>	None	<b>Speed Code:</b>	Single Speed
<b>Constant Torque Speed Range:</b>	6	<b>Motor Standards:</b>	NEMA
<b>Current @ Voltage:</b>	96.000 A @ 230.0 V	<b>Starting Method:</b>	Direct on line
	90.000 A @ 190.0 V	<b>Thermal Device - Bearing:</b>	None
	48.000 A @ 460.0 V	<b>Thermal Device - Winding:</b>	Normally Closed Thermostat
	45.000 A @ 380.0 V	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Design Code:</b>	A	<b>Winding Thermal 1:</b>	None
<b>Drip Cover:</b>	No Drip Cover	<b>Winding Thermal 2:</b>	None
		<b>XP Temp Code:</b>	T3C

Nameplate NP1401XPSLEV										
NO.						CC	010A			
S/N						TEMP CODE	T3C			
SPEC.	12-0000-0766					INV.TYPE	PWM			
CAT.NO.	VDRX32444T					C HP FR	60	C HP TO	90	
HP	40//30					CT HZ FROM	6	CT HZ TO	60	
VOLTS	230/460//190/380					VT HZ FROM	6	VT HZ TO	60	
AMPS	96/48//90/45					MAG CUR	40/20			
RPM	1775//1480					MX RPM	2700			
HZ	60//50	PH	3	CL	F	NOM.EFF.	94.1			
SER.F.	1.00	DES	A	SL HZ	0.83	WK2	7.19			
FRAME	324TC	RATING	40C AMB-CONT							
55C AMB @ 1.0 SF, 60C RISE										
1.15SF ON SINEWAVE					NEMA MG-1 PT.5,IP55					

Parts List		
Part Number	Description	Quantity
SA370406	SA 12-0000-0766	1.000 EA
RA360056	RA 12-0000-0766	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
LB1417	LABEL CARTON 6X4 PERFORATED BLANK ROLLS	1.000 EA
NP1401XPSLEV	SS XP INV UL CSA-EEV CC CL-I GP-C&D	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
LB1081C	ALUM XP CAUTION LABEL (COL PLANT ONLY-	1.000 EA
12FH1001A07P	FAN COVER, MACH W/EPOXY PRIMER & SLOT FO	1.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 EA
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	3.000 EA
09FN3001B03SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.200 LB
12EP1705A34PP15	FREP MACH. 312 W/EPOXY PRIMER & PAINT	1.000 EA
HA3051A03	1/2-13X2.75 BLT GR8 1.75 TO E NC F/S	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HA2067A01	ALUM SLINGER (AUTO)	1.000 EA
80XN1032A07	SET SCREW, HEX XOCK, ZN	2.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
HA4017A03	.125 X 1.75 GREASE EXT (F/S)	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HA4017A08	.125X3.50 GREASER EXTEN.	1.000 EA
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 EA
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 EA
12EP1707A26P	FACE MTD EP, XP 312 BRG, GROUP E W/EPOXY	1.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HA3051A03	1/2-13X2.75 BLT GR8 1.75 TO E NC F/S	4.000 EA
HA2009A49	SLINGER FOR GROUP E MTRS - 312 BRG.	1.000 EA
80XN1032A10	10-32 X 5/8 SET SC HEX SOCK	2.000 EA
10XN3118K40	5/16-18 X 2.75" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 EA
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 EA
12CB1003A01P	KOBX,MACH 2.00 NPT GROUP C MTRS,EPOXY PR	1.000 EA
10XN3118K24	5/16-18 X 1.50" HEX HD, GRADE 5	4.000 EA
WD1000B19	TERMINAL BURNDY L250HP	1.000 EA
10XN3816K12	3/8-16 X 3/4 HEX HD CAP GRADE 5	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	1.000 EA

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12CB1502A01P	CONDUIT BOX LID MACH. GROUP C MTRS	1.000 EA
84XN5013J32	SOCKET HD.CAP SCR,1/2-13 X 2"LG,ALLOY ST	10.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	10.000 EA
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.125 GA
PK6014	STEEL STRAP FOR 309-312 BASELESS MOTORS	4.000 EA
14PA1053	PKGP 314-316 FRAME 38X31 1X4 RISER	1.000 EA
10XN5013K10	1/2-13 X .625 HEX HD, GRADE 5	4.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT

**AC Induction Motor Performance Data**

Record # 43813

Typical performance - not guaranteed values

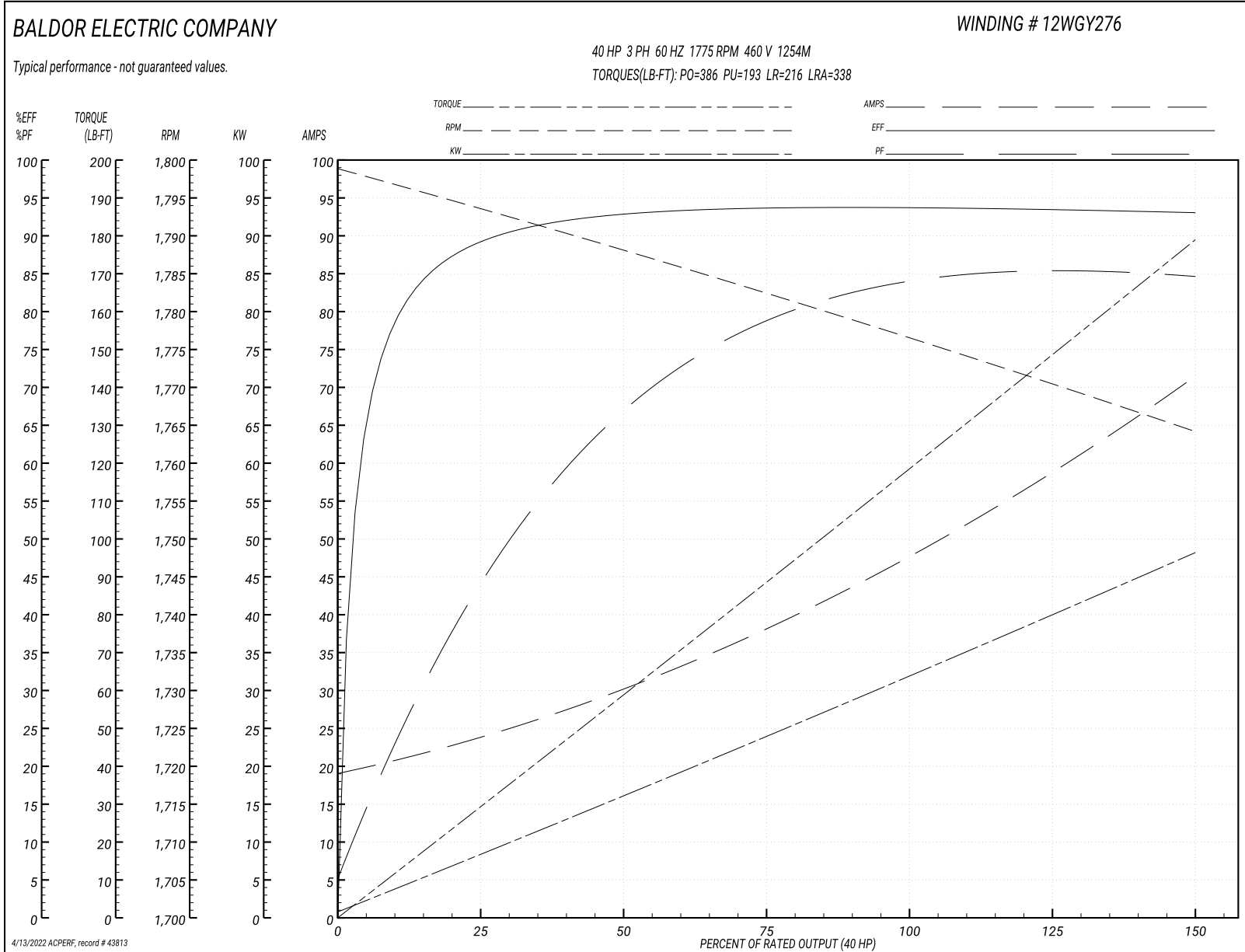
Winding: 12WGY276-R023		Type: 1254M	Enclosure: XPFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	40	Full Load Torque	118 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	96/48	Breakdown Torque	386 LB-FT	
R.P.M.	1775	Pull-up Torque	193 LB-FT	
Hz	60 Phase	Locked-rotor Torque	216 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	338 A	
Service Factor (S.F.)	1	No-load Current	19.9 A	
NEMA Nom. Eff.	94.1 Power Factor	Line-line Res. @ 25°C	0.14898 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	54°C	
		Locked-rotor Power Factor	27	
		Rotor inertia	7.19 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 40 HP**

% of Rated Load	25	50	75	100	125	150
Power Factor	47	69	78	83	85	85
Efficiency	90.1	93.5	94.2	94.2	93.8	93.1
Speed	1793.5	1788	1782.5	1776.6	1770.7	1764.1
Line amperes	22.9	29.5	38.4	48.1	59.2	70.8



Performance Graph at 460V, 60Hz, 40.0HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 74483

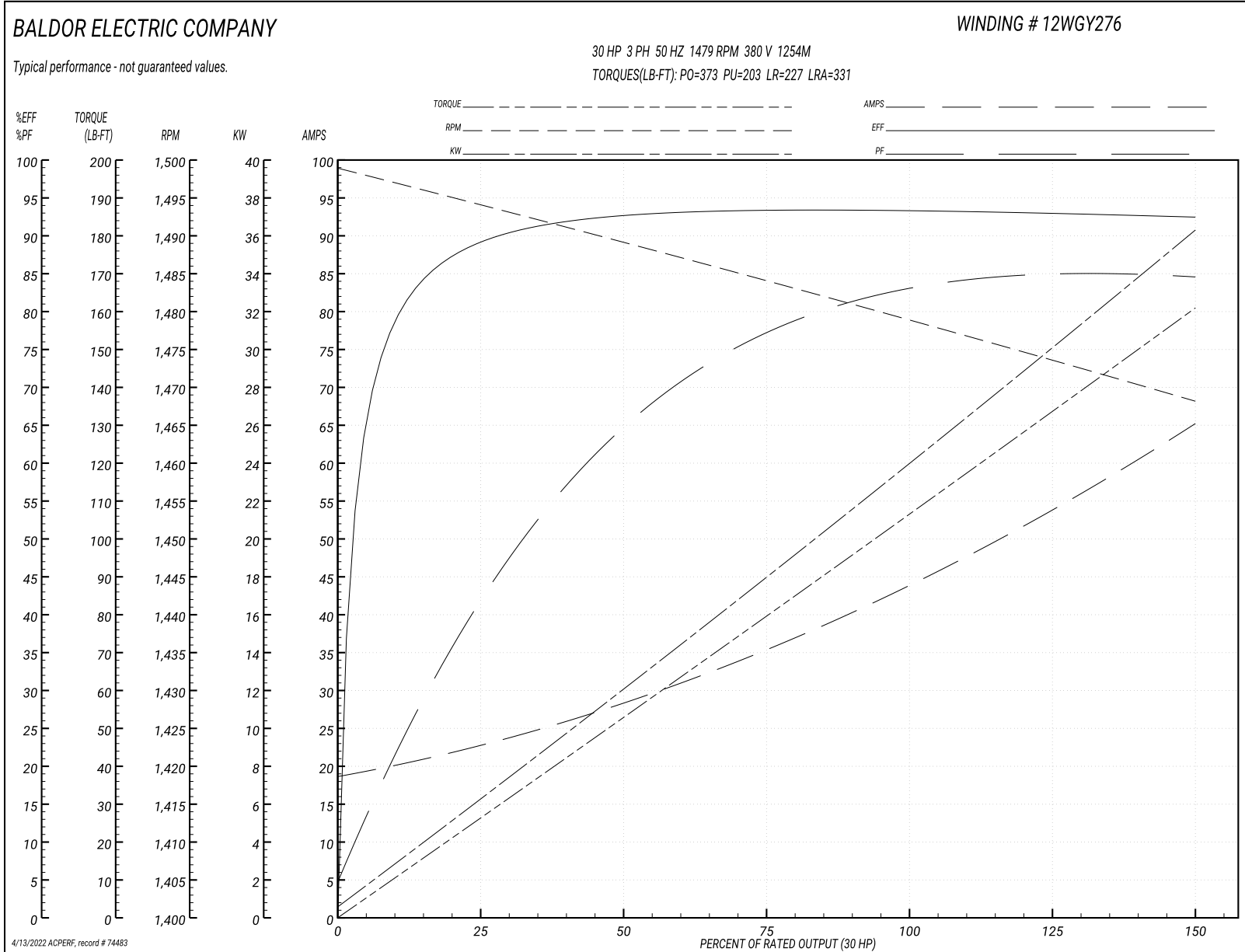
Typical performance - not guaranteed values

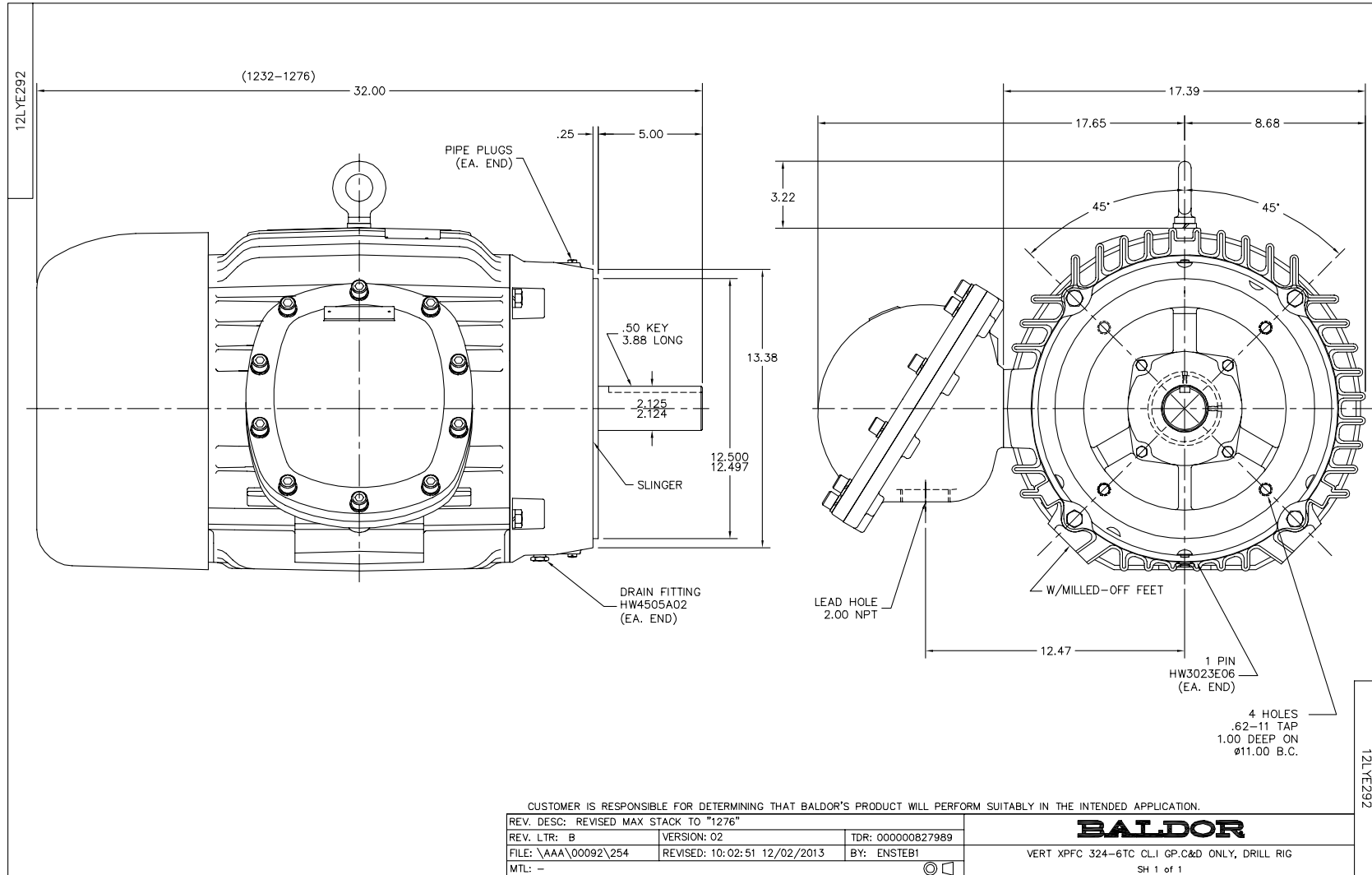
<b>Winding: 12WGY276-R040</b>		<b>Type: 1254M</b>		<b>Enclosure: XPFC</b>	
<b>Nameplate Data</b>			<b>380 V, 50 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	40//30		<b>Full Load Torque</b>	106 LB-FT	
<b>Volts</b>	230/460//190/380		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	96/48//90/45		<b>Breakdown Torque</b>	373 LB-FT	
<b>R.P.M.</b>	1775//1480		<b>Pull-up Torque</b>	203 LB-FT	
<b>Hz</b>	60//50	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	227 LB-FT
<b>NEMA Design Code</b>	A	<b>KVA Code</b>	H	<b>Starting Current</b>	331 A
<b>Service Factor (S.F.)</b>	1		<b>No-load Current</b>	19.39 A	
<b>NEMA Nom. Eff.</b>	94.1	<b>Power Factor</b>	82	<b>Line-line Res. @ 25°C</b>	0.145 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	47°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	57°C	
			<b>Locked-rotor Power Factor</b>	30.4	
			<b>Rotor inertia</b>	7.19 LB-FT <sup>2</sup>	

**Load Characteristics 380 V, 50 Hz, 30 HP**

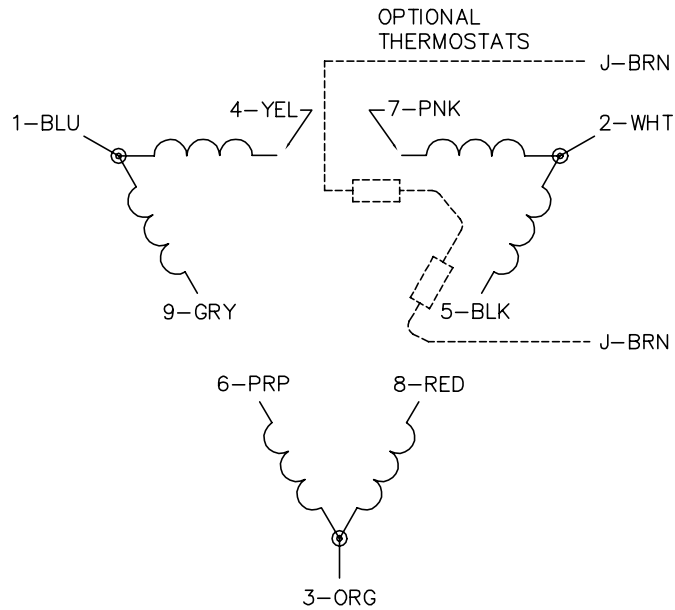
<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>
<b>Power Factor</b>	44	66	77	82	84	85
<b>Efficiency</b>	88.7	92.8	93.7	93.1	92.8	92.5
<b>Speed</b>	1494	1489	1484	1479	1474	1468
<b>Line amperes</b>	21.96	27.73	35.61	44.25	54.18	64.6

Performance Graph at 380V, 50Hz, 30.0HP Typical performance - Not guaranteed values

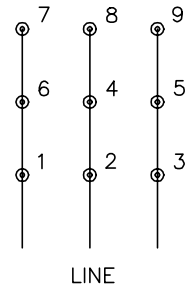




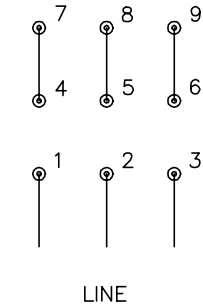
CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

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